

# Changfeng Gui

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| CONTACT INFORMATION | Department of Mathematics<br>One UTSA Circle<br>University of Texas at San Antonio<br>San Antonio, TX 78249   | <i>Phone:</i> (210)458-3073<br><i>Fax:</i> (210) 458-4439<br><i>E-mail:</i> changfeng.gui@utsa.edu<br><a href="http://www.math.utsa.edu/directory/changfeng/">http://www.math.utsa.edu/directory/changfeng/</a> |
| RESEARCH INTERESTS  | Nonlinear Partial Differential Equations and Applied Mathematics, Image Analysis and Processing   |   |
| APPOINTMENTS        | <b>2015-present</b> , <i>Dan Parman Endowed Distinguished Chair Professor</i> , <b>University of Texas at San Antonio</b> , USA<br><b>2013-2015</b> , <i>Program Director</i> , <b>National Science Foundation</b> , Arlington, Virginia, USA<br><b>2002-2016</b> , <i>Professor</i> , <b>University of Connecticut</b> , Storrs, USA<br><b>2002</b> , <i>Professor (Promotion)</i> , <b>University of British Columbia</b> , Vancouver, Canada<br><b>1999-2002</b> , <i>Associate Professor</i> , <b>University of Connecticut</b> , Storrs, USA<br><b>1998-2002</b> , <i>Associate Professor</i> , <b>University of British Columbia</b> , Vancouver, Canada<br><b>1995-1998</b> , <i>Assistant Professor</i> , <b>University of British Columbia</b> , Vancouver, Canada<br><b>1993-1995</b> , <i>Postdoctoral Fellow</i> , <b>McMaster University</b> , Hamilton, Canada<br><b>1991-1993</b> , <i>Courant Instructor</i> , <b>New York University</b> , New York, USA |   |
| EDUCATION           | <b>1991</b> , <i>Ph.D., Mathematics</i> , <b>University of Minnesota</b> , Minneapolis, MN, USA<br><b>1987</b> , <i>M.S., Mathematics</i> , <b>Peking University</b> , Beijing, China<br><b>1984</b> , <i>B.S., Mathematics</i> , <b>Peking University</b> , Beijing, China   |   |
| HONORS AND AWARDS   | <i>Simons Fellow</i> , Simons Foundation, 2019<br><i>Best Paper Award</i> , IEEE Signal Processing Society , 2015<br><i>Fellow of AMS</i> , 2013<br><i>Provost's Research Excellence Award</i> , University of Connecticut, Storrs, USA, 2007<br><i>Plenary Speaker</i> , AMS sectional meeting, Storrs, USA, Oct. 28, 2006<br><i>PIMS Research Prize</i> , Pacific Institute of Mathematical Sciences, Canada, 2002<br><i>Andrew Aisensdadt Prize</i> , Centre de Recherches Mathematiques, Canada, 1999<br><i>Excellent Thesis Award</i> , University of Minnesota, 1991  |   |

## GRANTS

NSF Grant, PI, Qualitative Study of the Mean Field Equation and Allen-Cahn Equation, 2019-2022

Simons Foundation, PI, Uniqueness and symmetry of solutions to some nonlinear PDEs, 2019-2020

NSF Grant, PI, Qualitative Studies of Some Partial Differential Equations and Systems, 2016-2019

NSF IPA, 2013-2015

NSF Conference Grant, Conference in Analysis and Partial Differential Equations, 2013

NSF Subgrant via IMA, Infinite Dimensional Dynamical Systems and Parabolic Equation, 2012

Simons Foundation, Collaboration Grant, PI, Solutions of Scalar and Vector Valued Allen-Cahn Equations, 2011-2016

NSFC Overseas Cooperative Grant, PI, Partial Differential Equations , 2006-2009;

NSF Grant, PI, Qualitative Study of Some Partial Differential Equations and Systems, 2005-2008;

NSF Grant, PI, Qualitative Study of Some Partial Differential Equations and Systems, 2002-2005;

University of Connecticut Large Grant, PI, Condensation Phenomenon in the Gierer-Meinhardt System, 2000-2001

NSERC Grant, PI, Study on Some Nonlinear Partial Differential Equations and Systems, 2000-2003

NSERC Grant, PI, Existence and Qualitative Properties of Solutions to Certain Differential Equations, 1996-2000

MITCS Grant, Co-PI, Modeling, Trading and Risk in the Market, 1999-2003

International University Scholar Grant, BC Ministry of Education, 1998

BC Ministry of Education Grant, BC Scholars to China, 1995

UBC Equipment Fund, 1995

## RECENT INVITED LECTURES

Dec. 4, 2021, Workshop on Nonlinear PDEs and their Applications (Online), Nanjing University of Forestry and Nanjing University, Nanjing, China

Nov. 15, 2021, Toulouse Analysis Seminar, University of Toulouse, Toulouse, France

Nov. 10, 2021, Nonlinear Analysis Seminar (Online), Rutgers University, New Brunswick, NJ

Oct. 28, 2021, International Conference on Nonlinear Elliptic and Parabolic Equations with Applications—Dedicated to Professor Yihong Du on the Occasion of His 60th Birthday, Online, Jiangsu Normal University, Xuzhou, China

Oct. 19, 2021, Seminaire Analyse et Probabilites, University of Paris at Dauphine, Paris, France

Sept. 11, 2021, Conference on Geometric Analysis and Nonlinear PDEs (online) , Northwestern Polytechnical University, Xi An, China

Aug. 15, 2021, Wutong Forum (online) , Hong Kong Chinese University (Shenzhen), Shenzhen,

China

July 28, 2021, Conference on Partial Differential Equations and Applications at Harbin Institute of Technology, Harbin, China

July 16, 2021, Colloquium, Shanghai Jiao Tong University, Shanghai, China

July 15, 2021, Colloquium, Nanjing University, Nanjing, China

July 10, 2021, Colloquium, Hunan University of Science and Technology, Xiangtang, China

June 28, 2021, International Conference on Reaction Diffusion Equation at Lanzhou University, Online

June 25, 2021, Colloquium (online), Yunnan University, Kunming, China

June 25, 2021, Colloquium, Kunming College, Kunming, China

June 24, 2021, Colloquium, Yunnan Normal University, Kunming, China

June 4, 2021, Colloquium, East China Normal University, Shanghai, China

April 23, 2021, Colloquium, Jiangsu University, Online

April 16, 2021, Colloquium, Beijing Technology and Business University, Beijing, China

March 20, 2021, Colloquium, Henan University, Kaifeng, China, Online;

Feb. 18, 2021, Applied Math Seminar, MacMaster University, Hamilton, Ontario, Canada, Online;

Nov. 13, 2020, PDE Seminar, East China Normal University, Shanghai, China, Online

Oct. 17, 2020, Topics in qualitative and quantitative properties of partial differential equations, 3rd Annual Meeting of the SIAM Texas-Louisiana Section, Online

Aug. 9, 2020, Colloquium(Online), Wuhan Institute of Technology, Wuhan, China

Aug. 7, 2020, Banff workshop on Interfacial phenomena in reaction-diffusion systems , Online

June 1, 2020, Asia-Pacific Analysis and PDE Seminar (online)

March 7, 2020, Texas DE Conference, Austin, TX

Feb. 19, 2020, Colloquium, University of California, Riverside, CA

Feb. 4, 2020, PDE Seminar, University of California, Irvine, CA

Jan.8, & 10, 2020, PDE Seminar, Hong Kong University of Science and Technology. Hong Kong

Dec. 23, 2019, PDE Seminar, Hong Kong University of Science and Technology. Hong Kong

Dec. 16, 2019, PDE Symposium, Central China Normal University, Wuhan, China

Nov. 28, 2019, Qualitative Theory on Nonlinear Partial Differential Equations, Kyoto University,

Kyoto, Japan

Nov. 16, 2019, Workshop on Elliptic Partial Differential Equations and Applications, Shanghai Jiaotong University, Shanghai, China

Nov. 14, 2019, Workshop on Nonlinear Partial Differential Equations and Applications, NYU-ECNU Institute of Mathematical Sciences, NYU-Shanghai, China

Nov. 2, 2019, Calculus of Variations:  
A Celebration of Paul Rabinowitz's 80th Birthday, Jeju, South Korea

Oct. 15, 2019, Analysis Seminar, Rutgers University, New Brunswick, New Jersey

Oct. 4, 2019, Geometric Analysis Seminar, Princeton University, Princeton, NJ

Sept. 26, 2019, Colloquium, Baylor University, Waco, TX

Sept. 23, 2019, PDE Seminar, Indiana University, Bloomington, IN

July, 3, 2019, International Conference on Partial Differential Equations and Applications, In Honor of 75th Birthday of Professor Haim Brezis, Beijing Normal University, Beijing, China

June 27, 2019, Recent Progress in Nonlinear Partial Differential Equations, Beihang University, Beijing, China

June 22, 2019, International Conference on Dynamical Systems and Applications, Lanzhou University, Lanzhou, China

June 1, 2019, The 6th International Workshop on Biomathematical Modelling and Its Applications, Huaiyin Normal University, Huai An, China

May 12, 2019, Workshop on Differential Equations in Life and Physical Sciences and Applications, Chongqing University, Chongqing, China

March 4, 2019, Applied Math Seminar, Brown University, Providence, RI

Dec. 14, 2018, Workshop on Recent advances in nonlinear PDEs, Wuhan University, Wuhan, China

Dec. 7, 2018, Geometric Analysis Seminar, Princeton University, Princeton, New Jersey

Dec. 4, 2018, PDE seminar, Rutgers University, New Brunswick, New Jersey

Dec. 3, 2018, Analysis Seminar, Courant Institute, New York University, New York

Nov. 7, 16, 2018, Recent Trends on Nonlinear PDEs of Elliptic and Parabolic Type, MATRIX, Mathematical Research Institute, Creswick, Australia

Nov. 1, 2018, MATRIX Satellite Conference on Recent Trends in nonlinear PDEs, University of Sydney, Sydney, Australia

Aug. 10, 2018, Seminar, Shanghai Jiao Tong University, Shanghai, China

Aug. 7, 2018, Seminar, Henan University, Kaifeng, China

July, 5, 2018, Seminar, The Central South University, Changsha, China

June 23, 2018, The International Conference on Nonlocal Dynamical System and Applications, Lanzhou University, Lanzhou, China

June 14, 2018, Recent Advances in Turbulence Research: Experiments, Theory, and Computations, AAAS Pacific Division Annual Meeting, Pomona, CA

June 2, 2018, International workshop on nonlinear partial differential equations and applications in geometry and biology, Shanxi Normal University, Xi An, China

May 18, 2018, International Conference on Variational Methods (ICVAM-4), Chern Institute, Nankai University, Tianjing, China

May 7, 2018, Colloquium, Tsinghua University, Beijing, China

April 22, 2018, AMS Spring Eastern Sectional Meeting, Northeastern University, Boston, MA

Jan. 8, 2018, Seminar, Institute of Mathematical Sciences, Hong Kong Chinese University, Hong Kong, China

Dec. 19, 2017, PDE Seminar, Central South University, Changsha, China

Dec. 8, 2017, International Workshop on Reaction-Diffusion Equations, South University of Science and Technology, Shenzhen, China

Nov. 4, 2017, Special Session on Nonlinear Elliptic Differential and Integral Equations, Fall Western Sectional Meeting University of California, Riverside, Riverside, CA

Oct. 13, 2017, Colloquium, University of Central Florida, Orlando, FL

Oct. 5, 2017, Applied Math Seminar, Purdue University, West Lafayette, IN

Sep. 20, 2017, Applied Math Seminar, Louisiana State University, Baton Rouge, LA

Aug. 10, 2017, Applied Math Seminar, Chinese Academy of Sciences, Beijing, China

July 9, 2017, Colloquium, Changsha University of Sciences and Technology, Changsha, China

July 5, 2017, The 6th BNU-PDE Workshop and Mini-courses, Beijing Normal University, Beijing, China

June 26, 2017, Colloquium, East China University of Science and Technology, Nanchang, China

June 22, 2017, International Workshop on Nonlinear Elliptic and Parabolic PDEs, NYU-Shanghai, Shanghai, China

June, 20, 2017, PDE Seminar, Nanjing University, Nanjing, China

June 14, 2017, The Eleventh East China Partial Differential Equations Conference, East China Normal University, Shanghai, China

June 13, 2017, PDE Seminar, Chinese University of Sciences and Technology, Hefei, China

June 12, 2017, PDE Seminar, Central China University of Sciences and Technology, Wuhan, China

June 9, 2017, PDE Seminar, Central China Normal University, Wuhan, China

June 8, 2017, Applied Math Seminar, Wuhan Institute of Physics and Mathematics, Wuhan, China

June 7, 2017, PDE Seminar, Wuhan University, Wuhan, China

June 3, 2017, University Distinguished Lushan Colloquium, Hunan University of Commerce, Changsha, China

May 7, 2017, Special Session on Common Threads to Nonlinear Elliptic Equations and Systems, Spring Eastern Sectional Meeting Hunter College, City University of New York, New York, NY

May 6, 2017, Special Session on Qualitative and Quantitative Properties of Solutions to Partial Differential Equations, Spring Eastern Sectional Meeting Hunter College, City University of New York, New York, NY

March 15, 2017, Differential Geometry Seminar, University of California at San Diego, San Diego, CA

March 14, 2017, Analysis Seminar, University of California at Irvine, Irvine, CA

Jan. 5, 2017, Colloquium, Central South University, Changsha, China

Dec. 9, 2016, Graduate Student Recruitment Fair, Department of Math, UTSA, San Antonio, Texas

Nov. 22, 2016, International Conference on Nonlinear Partial Differential Equations, University of New England, Armidale, Australia

Oct. 24, 2016, Math Seminar, South West Research Institute, San Antonio, Texas

Oct. 7, 2016, PDE Seminar, University of Houston, Houston, Texas

Sept. 28, 2016, Asymptotic Patterns in Variational Problems: PDE and Geometric Aspects, CMO-BIRS, Oaxaca, Mexico

Sept. 14, 2016, Analysis Seminar, University of Texas at Austin, Texas

July 26, 2016, PDE Seminar, University of Rome, Tor Vergata, Italy

July 6, 2016, International Conference on Perspectives in Geometric Analysis, Xi An, China

May 27, 2016, Colloquium, South University of Science and Technology of China, Shenzhen, China

May 25, 2016, Colloquium, Hunan Normal University, Changsha, China

April 10, 2016, Geometry Seminar, Stony Brook University, NY

April 6, 2016 Nonlinear Analysis Seminar, Rutgers University, NJ

April 5, 2016, Joint Rutgers-Princeton Geometric PDE Seminar, New Brunswick, NJ

April 1., 2016, Colloquium, Wright State University, Dayton, OH

Dec. 10, 2015, SIAM PDE Conference, Scottsdale, AZ

Dec. 1, 2015, PDE Seminar, UBC, Vancouver, Canada

July 2, 2015, Beijing International Center of Mathematics Research, Beijing, China

May 22, 2015, Colloquium, University of Texas at San Antonio, TX

March 27, 2015, Colloquium, Howard University, DC

Oct. 10, 2014, Colloquium, George Town University, DC

Sept. 16, 2014, Colloquium, American University, DC

May 27, 2014, Geometric Aspects of Semilinear Elliptic and Parabolic Equations: Recent Advances and Future Perspectives, Banff, Canada

May 23, 2014, International Conference on PDEs and Calculus of Variations, Wuhan, China

April 16, 2014, Colloquium, University of California, Riverside, CA

April 12, 2014, Special Session on Qualitative Theory for Non-linear Parabolic and Elliptic Equations, AMS Sectional meeting, Lubbock, Texas

March 21, 2014, Colloquium, George Washington University, DC

Nov. 26, 2014, Recent developments of nonlinear PDEs, Australian National University, Canberra, Australia

Nov. 11, 2013, PDE seminar, Penn State University, College Station, PA

Sept. 16, 2013, PDE seminar, John Hopkins University, Baltimore, Maryland

June 20, 2013, International conference on Analysis and Geometry, Wuyishan, China

June 18, 2013, Nanjing Conference on Geometric Analysis, Nanjing University, China

April 11, 2013, Nonlinear Science Seminar, CUNY Graduate Center, New York

April 10, 2013, Colloquium, Yeshiva University, New York

April 9, 2013, PDE seminar, Rutgers University, New Brunswick, New Jersey

April 2, 2013, Geometry and Topology Seminar, Stony Brook University, New York

Nov. 26-30, 2012, Singular limit problems in nonlinear PDEs, CIRM Luminy, Marseille, France

Nov.1, 2012, Dynamical Systems Seminar, IMA, Minneapolis, USA

Aug. 6-10, 2012, Recent trends in geometric and nonlinear analysis, Banff International Research Station, Canada

May 21-25, 2012, International Conference on Variational Methods (ICVAM-3), Chern Institute of Mathematics (CIM), Nankai University, Tianjin, China

May 8-11, 2012, International workshop on topics in nonlinear PDE, Postech, South Korea

April 3, 2012, Colloquium, University of California, Riverside

March 28, 2012, PDE seminar, University of Minnesota, Minneapolis

February 27, 2012, Nonlocal PDEs, Variational Problems and their Applications, IPAM, UCLA, Los Angeles,

Sept. 22, 2011, Mini-Symposium on the topic "Recent trends in nonlinear PDE", Graduate Center, CUNY, New York

July 11-14, 2011, The 8th East China Partial Differential Equations Conference & The 2th International Workshop on Reaction-Diffusion Models and Mathematical Biology, Xi An, China

June 27, 2011, PDE seminar, Cologne University, Cologne, Germany

June 17, 2011, PDE seminar, University of Athens, Athens, Greece

June 17, 2011, Analysis seminar, University of Athens, Athens, Greece

April 28, 2011, Applied PDE seminar, University of California, San Diego

April 22, 2011, Geometry Seminar, University of California, Santa Barbara

November 23, 2010, Analysis Seminar, University of California, Irvine

October 9-10, 2010, Invited Speaker, The Second Oklahoma PDE Workshop University of Oklahoma, Norman

August 8-13, 2010, Invited Speaker, Workshop on Recent Advances on de Giorgi's Conjecture and the Study of Entire Solutions of Nonlinear Scalar Equations, BIRS, Banff, Canada

August 1-4, 2010, Invited Speaker, Workshop on PDEs, Northwest University, Xi An, China

July 30-Aug.4, 2010, Invited Speaker, Workshop on Geometric Analysis 2010, Lan Zhou, China

July 19, 2010, PDE seminar, Capital Normal University, Beijing

July 16-18, 2010, Invited Speaker, International conference of PDEs in honor of Xinmou Wu, Beijing

May 18, 2010, Invited Speaker, NSF/CBMS Regional Conference in the Mathematical Sciences: The Mathematics of Diffusions, Tulane University, New Orleans

April 22, 2010, PDE seminar, George Washington University, DC

March 21-26, 2010, Workshop on Deterministic and stochastic front propagation, BIRS, Banff, Canada

March 11, 2010, Analysis Seminar, Columbia University, New York

March 9, 2010, PDE Seminar, Rutgers University, New Jersey

Dec. 28, 2009, Second Workshop on Nonlinear and Applied Analysis, Wu Town, China



July 10, 2009, Workshop on Asymptotic analysis in the calculus of variations and PDEs , PIMS, Vancouver, Canada

May 18, 2009, Topological and Variational Methods for Partial Differential Equations, Oberwolfach, Germany

March 10, 2009, IAS Geometric PDE Seminar, Princeton, NJ, USA

Jan. 17, 2009, 8th Pacific Northwest PDE meeting, Vancouver, Canada

Dec. 21, 2008, Special Session on Elliptic and Parabolic Equations, Joint AMS-CMS meeting, Shanghai, China

Dec. 1-3, 2008, Workshop "Singularities arising in nonlinear problems" (SNP2008), Kyoto, Japan

Oct. 8-10, Variational Methods for Elliptic PDE's and Hamiltonian Systems, Pohang University of Science and Technology (POSTECH), Pohang, Republic of Korea;

July 17- July 26, 2008, Invited Lectures (18 hours), The sixth Summer School on PDEs, Xiang Tan, China

July 10-16, 2008, Invited Lectures (10 hours), Summer School, East China Normal University, Shanghai, China

June 18, 2008, PDE seminar, University of Rome, Tor Vergata, Italy;

June 16, 2008, PDE seminar, Universita' Politecnica delle Marche, Ancona, Italy;

June 12, 2008, PDE seminar, SISSA, Trieste, Italy;

June 2-6, 2008, Invited Lectures (10 hours), School and Conference on Differential Geometry, International Center for Theoretic Physics(ICTP), Trieste, Italy;

May 24 - 28, 2008, International Conference on Image Process and Nonlinear Partial Differential Equations, Nanjing, China

Oct. 9, 2007, Workshop on Recent progress on nonlinear elliptic and parabolic problems and related abstract methods, BIRS, Banff, Canada

June 18-22, 2007, 10 hours Lectures, Summer school on PDEs, Universitat Politenica de Catalunya, Barcellona, Spain

June 12, 2007, Colloquium, Central Southern University of China, Changsha, China

June 6, 2007, Institute of Mathematical Sciences, Chinese University of Hong Kong, Hong Kong

May 22, 2007, Invited Speaker, International Conference on Variational Methods, Chern Institute of Mathematics, Nankai University, Tianjing, PRC;

Nov. 21, , 2006, Special Analysis Seminar, Courant Institute, New York University, NYC, USA;

Nov. 17, 2006, PDE Seminar, Rutgers University, New Brunswick, USA;

Oct. 28, 2006, Plenary Speaker, AMS sectional meeting, Storrs, USA;

July 3-7, 2006, 8 Hours Lectures on PDEs in Images Analysis, Summer School, East China Normal University, Shanghai, China

Mar. 20, 2006, Reaction-Diffusion and Free Boundary Problems, Banff International Research Station, Banff, Canada;

March 29, 2006, Exploring the Frontiers of Dynamic Nuclear Medicine Imaging for Medical and Molecular Applications, Banff International Research Station, Banff, Canada;

VISITING AND  
ADJUNCT  
POSITIONS

Oct. 19, -Nov. 21, 2021, University of Paris at Dauphine, France

June 1, -June 30, 2020, University of Paris at Dauphine, France (Cancelled due to Pandemic)

April 1-May 31, 2020, University of Sydney Mathematical Research Institute, Australia (Cancelled due to Pandemic)

Feb. 1-March 31, 2021, Visiting Scholar, University of California, Irvine

Dec. 18, 2019- Jan. 18 2020, Hong Kong University of Science and Technology, Hong Kong

Sept. 1-Oct. 30, 2019, Princeton University, Princeton, NJ

Sept. 2017-present, *Adjunct Professor, School of Engineering, UTSA*

June 1-July 31, 2018, 2019, 2021 *Visiting Adjunct Professor, Central South University, Changsha, China*

June 1-July 31, 2016, 2017, *Visiting Adjunct Professor, Hunan University, Changsha, China*

January 23, 2013-Aug.26, 2013, *Visiting Scholar, University of California, Irvine*

Sept. 10, 2012-Dec. 10, 2012, Long term visitor, IMA, University of Minnesota, Minneapolis, USA

June 15, 2011- Aug. 15, 2013, *Visiting Adjunct Professor, Hunan University, Changsha, PRC*

May 29-June 29, 2011, *Visiting Scholar, University of Paris at Dauphine, France*

January 15, 2011-May, 31 2011, *Visiting Scholar, University of California, Irvine*

July 1-Aug. 1, 2009, *Visiting Scholar, Pacific Institute of Mathematical Sciences, Vancouver, Canada*

2006-2009, *Changjiang Visiting Professor, Hunan University, Changsha, PRC*

Sept. 15, 2005- June 30, 2006, *New Direction Professor, IMA, University of Minnesota, Minneapolis, USA*

Aug. 15, 2005-Sept. 15, 2005, *Visiting Member, MSRI, University of California, Berkeley, USA*

June 01 -July 01, 2003, *PIMS, Vancouver, Canada*

Nov. 20-Dec. 20, 2002, *Borel Center, IHP, Paris, France*

May 1 -June 15 , 2001, *Newton Institute, Cambridge University, UK*

July 15, 2000- Aug. 19, 2000, *National Center of Theoretic Sciences, Xingzhu, Taiwan*

June 1, 2000- July 1, 2000, *Universite Paris-Dauphine, Paris, France*

April 1, 2000-June 1, 2000, *Visiting Scholar, FIM-Research Institute for Mathematics, ETHZ, Zurich, Switzerland*

June 15, 1999- July 15, 1999, *Visiting Professor, IMS, Chinese University of Hong Kong, Hong Kong*

April 1, 1999- May 31, 1999, *Visiting Professor, Hong Kong University of Science and Technology, Hong Kong*

July 1, 1997- August 30, 1997, *Visiting Scholar, Massachusetts Institute of Technology, Cambridge, USA*

## Conferences Organized

- Virtual workshop on Geometric Analysis and Partial Differential equations, Central South University, May 17-21, 2021;
- Workshop on Fractional Partial Differential Equations, Central South University, Changsha, China, Dec. 7-13, 2019;
- Workshop on Nonlinear Partial Differential Equations, Central South University, Changsha, China, July 19-19, 2019;
- Special Session on " Modeling and Qualitative Study of PDEs from Materials Science and Geometry" at the AMS Sectional Meeting, University of Connecticut Hartford Campus , Hartford, CT April 13-14, 2019;
- International Workshop on Mean Field Equations, Central South University, Changsha, China, June 25-29, 2018;
- Special Session on "Topics in qualitative properties of partial differential equations" at the AMS Sectional Meeting at Northeastern University, Boston, MA, April 21-22, 2018.
- Workshop on Physical, Geometrical and Analytical Aspects of Mean Field Systems of Liouville Type, Banff, Canada, April 1-6 , 2018;
- Texas DE conference, San Antonio, March 17-18, 2018;
- Scientific Committee, Conference on Nonlinear Analysis and PDE, Vancouver, Canada, July 8-12, 2013;
- Workshop on Recent Advances on de Giorgi's Conjecture and the Study of Entire Solutions of Nonlinear Scalar Equations: Interaction of PDEs and Differential Geometry, Banff, Canada, Aug. 8-13, 2010;
- Special session on " Elliptic and parabolic equations", Joint AMS-CMS meeting, Shanghai, China, Dec. 17-21, 2008;
- Special session on " Nonlinear elliptic and parabolic equations", American Mathematical Society Sectional Meeting, Storrs, Oct. 28-29, 2006;
- International Conference on Mathematical Methods in Image Reconstruction and Analysis, Shanghai, China, June 21-23, 2006;
- New Developments on Variational Methods and Their Applications, BIRS workshop, Banff, Canada, 2004
- Defects and their dynamics, BIRS workshop, Banff, Canada, 2003
- Thematic Programs on PDEs, Summer, Pacific Institute, Vancouver, 2001
- AMS special session, April, Hoboken, New Jersey, 2001
- The First Canada-China Math Congress, Beijing, China, 1999

## Editorial Board Member

Communications on Pure and Applied Analysis

Advanced Nonlinear Studies

Mathematical Theory and Applications

## PDEs

1. Changfeng Gui, Positive entire solutions of the equation  $\Delta u + f(x, u) = 0$ , *Journal of Differential Equations*, **99**, pp 245-280 (1992)
2. Changfeng Gui, Wei-Ming Ni and Xuefeng Wang, On the stability and instability of positive steady states of a semilinear heat equation in  $R^n$ , *Communications on Pure and Applied Mathematics*, **45**, pp 1153-1181 (1992)
3. Changfeng Gui and Xuefeng Wang, Life span of solutions of the Cauchy problem for a semilinear heat equation, *Journal of Differential Equations*, **115**, pp 166-172 (1995)
4. Changfeng Gui and Fanghua Lin, Regularity of an elliptic problem with a singular nonlinearity, *Proceedings of Royal Society of Edinburgh (Section A)*, **123A**, pp 1021-1029 (1993)
5. Changfeng Gui and Yuan Lou, Uniqueness and nonuniqueness of coexistence states in the Lotka-Volterra competition model, *Communications on Pure and Applied Mathematics*, **47**, pp 1571-1594 (1994)
6. Changfeng Gui, On the Lotka-Volterra competition model in symmetric domains, *Differential and Integral Equations*, **8**, pp 2079-2096 (1995)
7. Changfeng Gui, On positive entire solutions of the elliptic equation  $\Delta u + K(x)u^p = 0$  and its applications to Riemannian geometry, *Proceedings of Royal Society of Edinburgh (Section A)*, **126A**, pp 225-237 (1996).
8. Changfeng Gui and Xuefeng Wang, The critical asymptotics of scalar curvature of the conformal complete metrics with negative curvature, *Duke Mathematical Journal*, **76**, pp 293-302 (1994)
9. Changfeng Gui, Symmetry of the blow up set of a porous medium type equation, *Communications on Pure and Applied Mathematics*, **48**, pp 471-500 (1995).
10. Lia Bronsard, Changfeng Gui and Michelle Schatzman, A three layered solution in  $R^2$  for a variational problem with a symmetric three well potential, *Communications on Pure and Applied Mathematics*, **49**, pp 677-715 (1996).
11. Changfeng Gui, Existence of multi-bump solutions for nonlinear Schrödinger equations via variational method, *Communications in Partial Differential Equations*, **21**, pp 787-820 (1996).
12. Changfeng Gui, Multi-bump solutions for nonlinear Schrödinger equations, *C.R. Acad. Sc. Paris*, **322**, Serie I, pp 133-138 (1996).
13. Changfeng Gui, Multi-peak solutions for a semilinear Neumann problem, *Duke Mathematical Journal*, **84**, pp 739-769 (1996)
14. Nassif Ghoussoub and Changfeng Gui, New variational principles and multi-peak solutions for Neumann problems involving the critical Sobolev exponent, **Canadian Mathematical Society. 1945-1995, Vol. 3**, pp 125-152 (1996),
15. Changfeng Gui, Three layered solutions and other related problems in multiple phase transition, **Differential equations and applications (Hangzhou, 1996)**, Internat. Press, Cambridge,

MA., pp101–107, (1997)

16. Stanley Alama, Lia Bronsard and Changfeng Gui, Stationary layered solutions in  $R^2$  for an Allen-Cahn systems with multiple-well potentials, *Calculus of Variation and PDE*, **5**, 359-390 (1997)
17. Joel Feldman, Richard Froese, Nassif Ghoussoub and Changfeng Gui, An improved Moser-Aubin-Onofri inequality for radially symmetric functions on  $S^2$ , *Calculus of Variation and PDE*, **6**, pp 95-104 (1998)
18. Changfeng Gui and Nassif Ghoussoub, Multi-peak solutions for a semilinear Neumann problem involving Sobolev critical exponent , *Math. Zeit.*, **229**, pp443-474 (1998)
19. Changfeng Gui, Juncheng Wei and Matthew Winter, Multiple boundary peak solutions for some singularly perturbed Neumann problems , *Ann. Inst. H. Poincare, Analyse Nonlinéaire*. **17**, pp 47-82 (2000)
20. Changfeng Gui and Juncheng Wei, Multiple interior peak solutions for some singularly perturbed Neumann problems, *J. Diff. Eqns.*, **158**, 1-27 (1999)
21. Nassif Ghoussoub and Changfeng Gui, On a conjecture of De Giorgi and related problems , *Math. Ann.*, **311**, 481-491(1998)
22. Changfeng Gui and Juncheng Wei, On a sharp Moser-Aubin-Onofri inequality on for functions on  $S^2$  with symmetry, *Pacific Journal of Mathematics*, **194**, pp 349-358 (2000)
23. Changfeng Gui and Juncheng Wei, Multiple mixed boundary and interior peak solutions for some singularly perturbed Neumann problems, *Canadian Journal of Mathematics*, **52**, pp 522-538 (2000)
24. Martin Barlow, Rich Bass and Changfeng Gui, The Liouville property and a conjecture of de Giorgi, *Comm. Pure Appl. Math*, **Vol. 53**, pp1007-1038 (2000)
25. Changfeng Gui, Wei-Ming Ni and Xuefeng Wang, Further study on a nonlinear hear equation, *J. Diff. Eqns*, **Vol 169**, pp588-613 (2001)
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